REMARKS

Applicant hereby responds to the Office Action mailed on December 13, 2005 ("the Office Action").

Applicant respectfully requests entry of the Amendment filed on December 13, 2005, by which claims 55-57 were added. Accordingly, claims 25 and 40-57 are presented herein for examination.

Applicant further directs the Examiner's attention to the Information Disclosure Statement filed on December 13, 2005 and respectfully requests that references A-R and AA-BL, cited therein, be considered and made of record in the prosecution file of the instant application

Claims 25 and 40-54 stand rejected under 35 U.S.C. § 112, first paragraph and 35 U.S.C. § 103(a). For the reasons stated below, Applicant requests that these rejections be withdrawn.

I. REJECTIONS UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

Claims 25 and 40-54 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner contends that the limitation drawn to administering "elastase in a dose sufficient to cause enlargement of the diameter of the artery or vein" in the method for *in vivo* application of a therapeutic composition has no support in the as-filed specification. *See* Office Action, p. 3.

Applicant respectfully traverses this rejection on the grounds that the as-filed specification provides specific support for the recitation of "a composition comprising an elastase in a dose sufficient to cause enlargement of the diameter of the artery or vein" as recited in the pending claims. The as-filed specification describes treatment of humans (page 9, lines 1-2), and therapeutic use of elastase (page 12, line 11). Use of the invention to treat an artery or vein is specifically described, (page 26, original claim 11), as is use of the invention to treat an obstruction, such as a stenosis, or to treat a biological conduit susceptible to obstruction. (*Id.*, original claims 10 and 12). *See also* Specification at p. 9, lines 5-8). ("Subjects that may be

treated in accordance with the invention include those mammals suffering from or susceptible to . . . stenosis of hemodialysis graft, intimal hyperlasia, and/or coronary obstruction, and the like."); id. at p. 17, lines 9-11 ("Venous dilation can be performed either before or after interposing a graft between the artery and vein.").

The application further describes parameters that affect the therapeutic dose (page 15, lines 1, 20-22) and in addition describes the use of dosage determination tests to identify optimal doses for administration. (Page 15, lines 22-25).

The Examiner posits that this is "a matter of written description, not a question of what one of skill in the art would or would not have known." Office Action, page 5. However, Applicant respectfully points out that the issue for written description is what the specification conveys to one of skill in the art; thus, the understanding of the skilled artisan cannot be ignored when evaluating the sufficiency of a written description: As the Federal Circuit has explained: "The applicant must . . . convey to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention." *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991) (emphasis added).

In evaluating sufficiency of description for the term "dose sufficient" from the standpoint of one of skill in the art, the "absence of definitions or details for well established terms or procedures should not be the basis of a rejection under 35 U.S.C. § 112, ¶ 1, for lack of adequate written description." *See* Guidelines for Examination of Patent Applications Under the 35 U.S.C. 112, ¶ 1, 'Written Description' Requirement, 66 Fed. Reg. 1099, 1105 (January 5, 2001). Applicant submits that dosage determination testing, as referenced in the as-filed application, was an established procedure well known to those of skill in the art.

The Examiner further contends that "elastase was not used at all in the exemplified disclosure." Office Action, page 5. However, as the Federal Circuit has recently explained, "examples are not necessary to support the adequacy of a written description . . . ." *Falkner v. Inglis*, No. 05-1324 (Fed. Cir. May 26, 2006), Slip Op. at 14.

For the reasons stated above, the as-filed specification provides a supporting written description for the methods as presently claimed Accordingly, applicant respectfully requests that this rejection be withdrawn.

II. REJECTIONS UNDER 35 U.S.C. § 103

Claims 25 and 40-54 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kalles et al. and U.S. Patent No. 5,834,449 to Thompson et al. ("the Thompson '449 Patent"). Applicant respectfully traverses this rejection.

A. Kalles et al. Is Not Prior Art to the Instant Application

Applicant respectfully points out that Kalles et al. was published in February, 2002. However, the instant application is a continuation of U.S. Application No. 09/669,051, filed September 24, 2000, which in turn claims the benefit of U.S. provisional application No. 60/155938, filed September 24, 1999. *See* § 17B of Transmittal Letter dated September 24, 2003 (amending the specification to refer to the parent application). Accordingly, Kalles et al is not prior art to the instant application , and the rejection on Kalles et al. should be withdrawn.

B. The Thompson '449 Patent Does Not Render the Instant Application Obvious

The Examiner contends that the Thompson '449 Patent "discloses a method for enlarging the diameter of abdominal aorta by locally administering porcine pancreatic elastase (col. 8, lines 50-65)." Office Action, p. 6.

Applicant respectfully traverses, on the grounds that the Thompson '449 Patent neither teaches nor suggests administering elastase to a human subject, as recited in the present claims. On the contrary, the Thompson '449 Patent is concerned with a method for inhibiting proteolytic (*e.g.*, elastolytic) activity in order to prevent enlargement of blood vessels. Specifically, the Thompson '449 Patent teaches a method for inhibiting the progression of aortic and other vascular aneurysms by administering tetracycline compounds as inhibitors of proteolytic activity. *See* col. 1, lines 6-7. Thus, the Thompson '449 Patent teaches "a method for protecting elastic fibers in the medial lamellae of blood vessels from abnormal degradation which can otherwise lead to dilation and/or aneurysm." Col. 6, lines 32-35.

The passage cited by the Examiner describes the use of elastase as "an accepted model for experimental induction of abdominal aortic aneurysms" in male Wistar rats. *See* col. 8, lines 54-56. In Example 1 of Thompson, rats are "subjected to perfusion of an isolated segment of the infrarenal abdominal aorta" with high levels of porcine pancreatic elastase in order to induce aneurysms, as a model system in which to demonstrate the therapeutic effects of tetracycline compounds as proteolytic inhibitors. Nowhere does the Thompson '449 Patent teach or suggest the therapeutic administration of elastase. Indeed, the Thompson '449 Patent teaches away from the therapeutic application of elastase, as claimed in the instant application.

Accordingly, the Thompson '449 Patent does not render obvious the presently claimed subject matter, and the rejection under 35 U.S.C. § 103(a) should be withdrawn.

CONCLUSION

Applicant respectfully requests that the Examiner reconsider and withdraw the outstanding rejections and allow the claims to issue. Applicant believes that no additional fees are required. In the event that any fee is required, the Director is hereby authorized to charge any required fees to Fried, Frank, Harris, Shriver & Jacobson LLP Deposit Account No. 06-0920.

Respectfully submitted,

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Stephen S. Rabinowitz (Reg. No. 40,286)
FRIED, FRANK, HARRIS, SHRIVER & JACOBSON LLP
One New York Plaza
New York, New York 10004
(212) 859-8973